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1 RECORD OF ORAL HEARING  
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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
8  
9

10 *Ex parte* KUNIO YAMANE, NOBUHITO HAGIWARA,  
11 SHOTARO ITAMI, and HIDEKAZU KANEOKA  
12  
13

14 Appeal 2011-000213  
15 Application 10/593,633  
16 Technology Center 1700  
17  
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19 Oral Hearing Held: October 25, 2011  
20  
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22 Before ADRIENE LEPIANE HANLON, JEFFREY T. SMITH, and  
23 RAE LYNN P. GUEST, *Administrative Patent Judges*.  
24

25 APPEARANCES:

26  
27 ON BEHALF OF THE APPELLANT:

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35 The above-entitled matter came on for hearing on Tuesday, October  
36 25, 2011, commencing at 9:51 a.m., at the U.S. Patent and Trademark

1 Office, 600 Dulany Street, Alexandria, Virginia, before Paula Lowery,  
2 Notary Public.

3 P R O C E E D I N G S

4 THE USHER: Good morning. Calendar Number 59, Appeal Number  
5 2011-000213, Mr. Hunter.

6 JUDGE HANLON: You have 20 minutes to present your case and  
7 may begin when you're ready.

8 MR. HUNTER: Good morning. May it please the Board, my name is  
9 Thomas Hunter. I'm appearing on behalf of Applicants in Appeal 2001-  
10 000213.

11 The Board is familiar with the claims and the Briefs, so if there are  
12 any questions, I can start there; or I can begin --

13 JUDGE GUEST: 2001 or 2011?

14 MR. HUNTER: I'm sorry, 2011.

15 JUDGE GUEST: I'm just making sure.

16 MR. HUNTER: Are there any questions? I can start there, or begin  
17 with prepared remarks.

18 JUDGE HANLON: You can begin.

19 MR. HUNTER: Claims pending in the application are Claims 1 and 3  
20 through 9. Claims 1 and 4 through 9 have been rejected under 103 as being  
21 unpatentable over Daichou and Alger.

22 In addition, Claim 3 has been rejected under 103 as being  
23 unpatentable over Daichou in view of Alger and Wada.

24 Today I want to focus on two main issues in the Briefs. The first  
25 being that Daichou and Alger fail to disclose or suggest using two cross-

1 linking agents having specific weight ratios as claimed. Second, the  
2 Examiner misunderstands the examples of this patent.

3 Regarding the first issue, the claimed low specific gravity unsaturated  
4 polyester resin composition is characterized at least in part by using two  
5 cross-linking agents, Ingredients A and B, having a specific weight ratio.

6 The amount and the weight ratio influence not only the heat resistance  
7 of the cured product, but also the coating properties of the cured product.

8 In this regard, although the Examiner refers to heat resistance in the  
9 coating property in the advisory action of March 5, 2010, the heat resistance  
10 of a cured product and its coating property -- as far as putting paints on it --  
11 are separate and distinct properties. There's no predictable relationship  
12 between the two whatsoever.

13 I'd direct the Board's attention to examples 26 and 27, as well as  
14 comparative examples 10 and 15 in the specification, which demonstrate  
15 these properties are distinct and no predictable relationship exists.

16 JUDGE SMITH: Excuse me, Counselor, regarding your showing, are  
17 there other differences between Example 26 and comparatives 10 and 15?

18 MR. HUNTER: Yes, actually 26 has styrene monomer only. It has a  
19 ratio of 0 to 100 between A and B.

20 JUDGE SMITH: Okay.

21 MR. HUNTER: Whereas, if you look at Example 27 where the  
22 weight ratio again is above it, it's a ratio of 30 to 70. You'll obtain poor heat  
23 resistance, but very good coating properties.

24 So, again, that's showing both ends of the ranges, or outside the ranges  
25 of the end points where one property is affected and the other is not.

1 JUDGE SMITH: How does that compare -- I'm trying to figure out  
2 your relationship between comparative 10 and 15 based upon that.

3 MR. HUNTER: Well, comparatives 10 and 15 were identified by the  
4 -- it's just merely showing even if you were to get a product that had high  
5 gloss, excellent coating properties, it doesn't necessarily mean you can have  
6 excellent or acceptable heat resistant qualities.

7 That's the reason they were relying on those two examples.

8 JUDGE SMITH: What I'm trying to figure out, to compare those two  
9 examples to what's considered to be inside of your invention and which  
10 example should I look to?

11 MR. HUNTER: I would argue it would be Examples 9 through 17, as  
12 compared to Examples 26 and 27 to demonstrate the unexpected results.

13 JUDGE SMITH: I'm trying to get a back-to-back showing because --  
14 okay, let me do it this way.

15 Comparative 10 to 15 have your diallylphthalate monomer and  
16 styrene monomer in ranges of -- well, they're present 5 percent, I believe for  
17 diallylphthalate, and 23.5 for the styrene monomer -- to give us a ration of A  
18 to B of 10 to 90.

19 MR. HUNTER: Yes.

20 JUDGE SMITH: If you go back to your table where you have several  
21 examples of the same two components in the same ratios, you get varying  
22 improvement and heat resistance and coating property.

23 MR. HUNTER: With comparative example 10, the amount of the  
24 glass balloon is outside of the scope of the claim. With comparative  
25 example 15, again, the calcium carbonate is outside the scope of the claim.

1 JUDGE SMITH: So isn't it, in fact, those components that are  
2 controlling these properties and not the ratio of A to B as you're arguing?

3 MR. HUNTER: What the Applicants were relying on with  
4 comparative examples 10 and 15 was just to merely show that the two  
5 properties, which the Examiner kept referring to the heat resistance as being  
6 a coating property, are completely separate. You can affect one without  
7 affecting the other.

8 JUDGE SMITH: But my question is all your comparatives appear to  
9 be at this range of 10 to 90 percent, and you're saying you did not get  
10 consistently good results. But the ratio of those two components are the  
11 same, and the results are varying. Therefore, presumably it must be some  
12 other component in your composition that's causing this change.

13 MR. HUNTER: Again, I would go back to Examples 26 and 27  
14 which do not meet the standards within the claim language also.

15 So if you compare those, which do meet one on one with the  
16 exception of the A to B ratios, the properties aren't affected as well.

17 JUDGE SMITH: I'm just not sure how you're tying that to the ratio.  
18 That's where my problem is.

19 The closest back-to-back showing is not coming from Examples 26  
20 and 27. It will come from one of your examples where you do have that  
21 same ratio, again, and you are getting varying results.

22 Furthermore, did you disclose in your specification that this  
23 combination of A to B actually affects these two? Specifically, does not say  
24 that it's this ratio that has the effect on the coating property and the heat  
25 resistance?

1 MR. HUNTER: That's my understanding, yes. Along with that, the  
2 combination of the two references cited by the Examiner don't put forth a  
3 prima facie case of obviousness anyway.

4 The showing of unexpected results was addressing throughout  
5 prosecution the Examiner arguing that the results only showed one ratio of  
6 the combination.

7 But if you were to combine Daichou with Alger, there is no reason  
8 that anyone would come up with a ratio.

9 JUDGE SMITH: So when Daichou tells us that the styrene and  
10 diallylphthalate can be used in combination, that's not a teaching?

11 MR. HUNTER: It says it can be used in combination, but it doesn't  
12 express any ratio whatsoever. The Examiner relies on Alger, which states  
13 that diallylphthalate will replace stearate to generate heat-resistant  
14 properties.

15 There's no teaching they would be used in combination in Alger.  
16 Moreover, one skilled in the art would not have any reason to attempt to  
17 optimize that ratio to obtain better heat resistance and better coating  
18 properties.

19 JUDGE SMITH: Okay.

20 MR. HUNTER: If someone were to read Alger, they would  
21 understand that greater heat resistance is obtained when styrene is replaced  
22 with diallylphthalate.

23 Thus, if someone were to combine them, as the Examiner says, for  
24 better heat-resistant properties, they're going to remove the diallylphthalate,  
25 which Daichou leaves as an option. They're either alone or individually.

1           So if they want better heat-resistant properties, they're going to  
2 replace it. There's no teaching it would be used in combination. There's no  
3 disclosure whatsoever.

4           So even if we look to replace it, which would be representative of  
5 example 26 -- if we're to follow Alger, we'll replace the diallylphthalate of  
6 Daichou using only the styrene, we'll have good heat-resistant properties as  
7 the examiner asserted. However, the coating properties are poor.

8           Even if someone were to use them in combination, there's no teaching  
9 they would attempt to optimize the ratio the Examiner asserted to get both  
10 the coating properties and the heat-resistant properties.

11          JUDGE SMITH: Anything further?

12          MR. HUNTER: No.

13          JUDGE HANLON: Any questions?

14          JUDGE SMITH: No further questions.

15          JUDGE GUEST: No questions.

16          JUDGE HANLON: Thank you.

17          (Whereupon, the proceedings at 10:03 a.m. were concluded.)